Amendments to the Claims

The listing of claims presented below replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1-14. (cancelled)

15. (currently amended) An artificial corundum crystal containing a seed crystal and having at least one crystal face selected from the group consisting of a {113} face, a {012} face, a {104} face, a {110} face, a {101} face, a {116} face, a {211} face, a {122} face, a {214} face, a {100} face, a {125} face, a {223} face, a {131} face, and a {312} face, wherein a basic shape of the seed crystal is a hexagonally dipyramidal shape.

16. (currently amended) An artificial corundum crystal containing a seed crystal and having a dominant crystal face other than a {001} face, wherein a basic shape of the seed crystal is a hexagonally dipyramidal shape.

17. (previously presented) The artificial corundum crystal according to claim 15, wherein the artificial corundum crystal is derived from a crystal having a hexagonally dipyramidal shape.

18. (previously presented) The artificial corundum crystal according to claim 16, wherein the artificial corundum crystal is derived from a crystal having a hexagonally dipyramidal shape.

19. (previously presented) The artificial corundum crystal according to claim 15, wherein a chromium is added as a coloring component.

20. (previously presented) The artificial corundum crystal according to claim 16, wherein a chromium is added as a coloring component.

21. (currently amended) A process for producing an artificial corundum crystal,

wherein an artificial corundum crystal having a hexagonally dipyramidal shape as its base shape is formed with a seed crystal by a flux evaporation method of heating a sample containing a raw material and a flux to precipitate a crystal and grow the crystal by use of flux evaporation as driving force, and wherein a basic shape of the seed crystal is a hexagonally dipyramidal shape.

22. (previously presented) The process for producing an artificial corundum crystal according to claim 21, wherein the flux contains a molybdenum compound.

23. (previously presented) The process for producing an artificial corundum crystal according to claim 22, wherein the molybdenum compound is a molybdenum oxide, or a compound which is heated to generate the molybdenum oxide.

24. (previously presented) The process for producing an artificial corundum crystal according to claim 22, wherein the flux contains an evaporation inhibitor.

25. (previously presented) The process for producing an artificial corundum crystal according to claim 24, wherein the evaporation inhibitor is an alkali metal compound.

26. (previously presented) The process for producing an artificial corundum crystal according to claim 25, wherein the alkali metal compound is an alkali metal oxide, or a compound which is heated to generate the alkali metal oxide.

27. (previously presented) The process for producing an artificial corundum crystal according to claim 26, wherein a mol number of an alkali metal atom in the alkali metal compound is 40% or less by mol of a total mol number of the sample.

28. (previously presented) The process for producing an artificial corundum crystal according to claim 21, wherein a mol number of the raw material is 10% or less by mol of a total mol number of the sample.

29. (previously presented) The process for producing an artificial corundum crystal according to claim 21, wherein the seed crystal is a corundum crystal.

30. (previously presented) The process for producing an artificial corundum crystal according to claim 21, wherein the raw material contains a chromium compound.